

Habitats Regulations Assessment Addendum

March 2014



Introduction

The original Habitats Regulations Assessment HRA was published alongside the January 2013 version of the Proposed Submission Core Strategy. It can be found online at www.lewes.gov.uk/Files/plan_2013_HRA.pdf.

This report has been written to accompany the consultation on the Focussed Amendments version of the Core Strategy. This report does not repeat the 2013 HRA as much of the content remains accurate. Instead, it only details any changes to that document. As such, this report should be read in conjunction with the 2013 HRA.

Main Report

Paragraph 5.10 is changed to read the following:

5.10 Following the initial ESCC report, the process was repeated for the housing distribution that the Proposed Submission version of the Core Strategy proposed. Such work has been repeated to take into account the housing distribution of the Core Strategy Focussed Amendments document. These findings are presented in a report, shown as Appendix 1. The report found that, additional transport movements caused by the Core Strategy on the roads within 200m of the Lewes Downs SAC would be:

- 936 AADT on A26 south of B2192
- 363 AADT on A26 north of B2192
- 573 AADT on B2192

Reason for change: Transport work has been updated to reflect Focussed Amendment's housing distribution.

Paragraph 5.18 is changed to read the following:

5.18 The same methodology used for assessing the affected roads around the Lewes Downs SAC was used to assess the affected roads around the Ashdown Forest SAC. The findings of the report by ESCC are presented in Appendix 3. The report found that, additional transport movements caused by the Core Strategy on the roads within 200m of the Ashdown Forest SAC/SPA would be:

- 119 AADT on A22
- 190 AADT on A26
- 92 AADT on A275
- 22 AADT on B2026

Reason for change: Transport work has been updated to reflect Focussed Amendment's housing distribution.

Bulletpoint 2 of paragraph 6.3 is changed to read the following:

2. Unless site specific mitigation solutions are agreed by the District Council and Natural England and delivered, any development leading to an increase of one or more dwellings within the 7km zone will be required to make a financial contribution to deliver SANG provision and to fund its long-term maintenance

and management in order to offset the impact of new residential development on the Ashdown Forest.

Reason for change: To make clear that site specific mitigation can be provided instead of SANGs, in certain circumstances.

Bulletpoint 3 of paragraph 6.3 is changed to read the following:

3. SANG(s) will be provided at an appropriate scale, design and location in accordance with advice from Natural England. The delivery of a SANG or SANGs is in order to successfully offset the impact of residential development in the 7km zone around the Ashdown Forest. Therefore, until such a time that appropriate SANG provision is delivered or site specific mitigation is provided that is agreed to be suitable by the District Council and Natural England, development resulting in a net increase of one or more dwellings within the 7km zone will be resisted.

Reason for change: To make clear that site specific mitigation can be provided instead of SANGs, in certain circumstances.

Bulletpoint 2 of paragraph 7.17 is changed to read the following:

2. Unless site specific mitigation solutions are agreed by the District Council and Natural England and delivered, any development leading to an increase of one or more dwellings within the 7km zone will be required to make a financial contribution to deliver SANG provision and to fund its long-term maintenance and management in order to offset the impact of new residential development on the Ashdown Forest.

Reason for change: To ensure that the summary reflects the recommendations in the main report.

Bulletpoint 3 of paragraph 7.17 is changed to read the following:

3. SANG(s) will be provided at an appropriate scale, design and location in accordance with advice from Natural England. The delivery of a SANG or SANGs is in order to successfully offset the impact of residential development in the 7km zone around the Ashdown Forest. Therefore, until such a time that appropriate SANG provision is delivered or site specific mitigation is provided that is agreed to be suitable by the District Council and Natural England, development resulting in a net increase of one or more dwellings within the 7km zone will be resisted.

Reason for change: To ensure that the summary reflects the recommendations in the main report.

Appendices

The following pages relate to updates to some of the 2013 HRA's appendices. Whilst the updates are minor and have not ultimately altered the outcomes in the main report, where changes have occurred we have provided a full replacement appendix document, rather than a schedule of changes done for the main report. This is in the interest of clarity.

Appendix 1 – Traffic Increases at Lewes Downs SAC

Lewes District Council Emerging Core Strategy

Habitats Regulations Assessment

An assessment of the significance of increases in traffic resulting from the Lewes District Submission Draft Core Strategy on the Lewes Downs Special Area of Conservation

SECOND UPDATE late MARCH 2014

R New
East Sussex County Council **CET**

FINAL 25 March 2014

Introduction

In early 2011 Lewes District Council, with guidance from Natural England, undertook an Appropriate Assessment Screening Opinion¹ on the potential affect that the Core Strategy, being prepared by Lewes District Council and South Downs National Park Authority, could have on protected European sites.

Among other things, the Screening Opinion concluded that, based on the information at that time, it was not possible to determine that the Core Strategy would not cause a significant effect on the Lewes Downs Special Area Of Conservation (SAC) due to the pollution caused by vehicles from additional development. Thus, using the precautionary principle, further work was needed to examine the impact of the Core Strategy on the Lewes Downs SAC.

This paper investigates the amount of traffic likely to be generated by development if development came forward at levels suggested in the Submission Draft Core Strategy on roads near to the Lewes Downs SAC. It concludes by considering whether the resulting increased traffic would have a significant effect on the Lewes Downs SAC. The findings of the report will help the District Council and National Park Authority in determining future amounts and locations of new development.

This report incorporates revised housing numbers supplied by Lewes District Council in March 2014.

¹ Found here: http://www.lewes.gov.uk/Files/plan_AAscreening.pdf

Background

Sites

The European sites within the scope of the assessment are:

- Lewes Downs SAC: semi-natural dry grasslands and scrubland facies on calcareous substrates.

Air pollution types

The main pollutant effects of interest are acid deposition and eutrophication by nitrogen deposition.

Acid deposition: caused by oxides of nitrogen (NO_x) (or sulphur dioxide, SO₂) reacting with rain/cloudwater to form nitric (or sulphuric) acid, and is caused primarily by energy generation, as well as road traffic and industrial combustion. Both wet and dry acid deposition have been implicated in the damage and destruction of vegetation (heather, mosses, liverworts and lichens are particularly susceptible to cell membrane damage due to excessive pollutant levels) and in the degradation of soils and watercourses (including acidification and reduced microbial activity).

Eutrophication by nitrogen deposition: consists of the input of nitrogen from NO_x (and sometimes ammonia, NH₃) emissions by deposition, and is caused primarily by road traffic, as well as energy generation, industrial combustion and agricultural practices. Nitrogen deposition can cause direct damage to heather, mosses, liverworts and lichens, as well as other plant species, because of their sensitivity to additional atmospheric nitrogen inputs, whilst deposition can also lead to long term compositional changes in vegetation and reduced diversity.

Furthermore, while plants are able to detoxify and assimilate low exposure to *atmospheric concentrations of NO_x*, high levels of uptake can lead to detrimental impacts including:

- Inhibition of pigment biosynthesis, leading to reduced rates of photosynthesis;
- Water soaking as NO₂ molecules attach to lipids in membranes, causing plasmolysis (removal of water) and eventually necrosis;
- Inhibition of lipid biosynthesis, leading to reduced rates of regeneration and growth;
- Injury to mitochondria and plastids, essential to internal processing of energy and proteins;
- Decrease in stomatal conductance of air and water vapour; and
- Inhibition of CO₂ fixation (at least under low light levels).

Nitrogen plays an important role in all three impact mechanisms. Sulphur dioxide emissions, which have decreased significantly in the UK over the last two to three decades through tighter regulation, are generally associated with centralised power generation, while ammonia emissions are largely related to agricultural sources and some industrial processes. The Emerging Core Strategy does not promote new energy generation facilities or significant changes to District's agricultural economy.

Over half of all emissions of nitrogen and nitrogen oxides in the UK are the result of vehicle exhausts, with an estimated 92% of those associated with residential development being contributed by road traffic (Dore *et al*, 2005). Nitrogen emissions from traffic generated by residential and commercial developments will therefore be the focus of this part of the assessment.

Guidance

The Design Manual for Roads and Bridges² (DMRB) provides guidance on the assessment of the impact that road projects may have on local air quality. Specific provision is made in relation to sites designated pursuant to the Habitats Directive. The DMRB usually relates to proposed new roads.

However the guidance clarifies that "*where appropriate, the advice may be applied to existing roads.*" Thus, in accordance with this guidance and with the agreement of Natural England, this study examines whether there is a likely significant effect on the Lewes Downs SAC, using the DMRB guidance.

DMRB provides a scoping assessment for local air quality and initially requires the identification of roads which are likely to be affected by the proposals. The criteria for defining an **affected road** are:

- road alignment will change by 5 metres or more; or
- daily traffic flows will change by 1000 Annual Average Daily Trips (AADT) or more; or
- Heavy Duty Vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10km/hr or more; or
- Peak hour speed will change by 20km/hr or more.

The scoping assessment then requires that nature conservation sites within 200 metres of the road and their characteristics be identified (including SACs and Special Protection Areas). The guidance then clarifies that if none of the roads in the network meet the traffic / alignment criteria (that is they are not affected roads) **or** there are no relevant designated sites near the **affected roads**, then the impact of the scheme can be considered neutral in terms of local air quality and no further work is needed.

² HA 207/07

Study Methodology

Affected roads

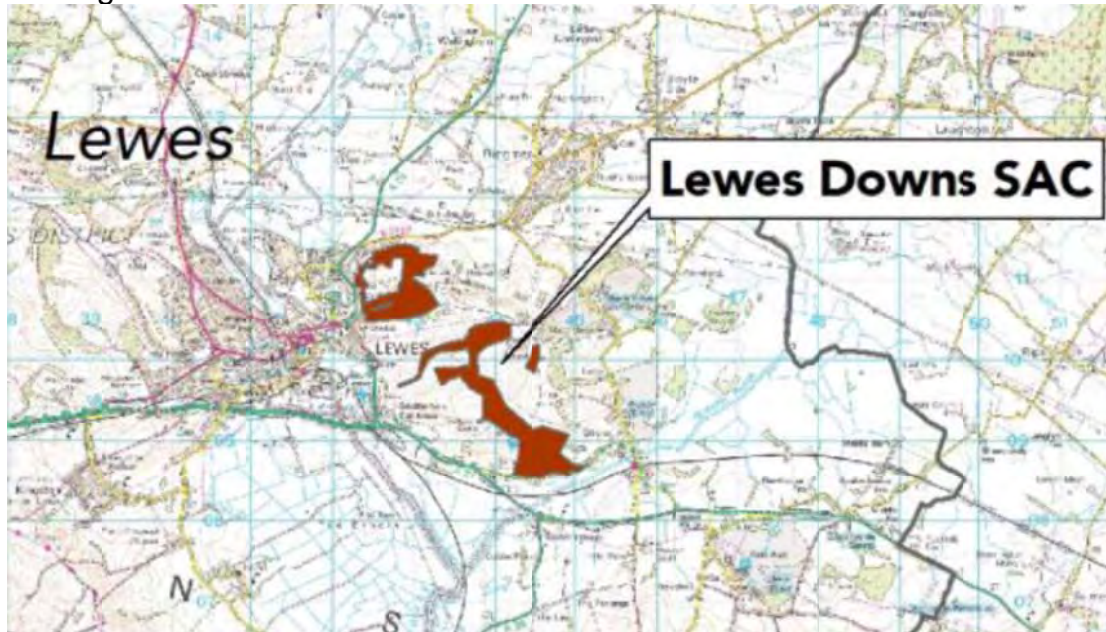
There are three possible affected roads within 200 metres of the Lewes Downs SAC:

B2192 Ringmer Road;

A26 Lewes – Uckfield road (north of B2192)

A26 Lewes – Uckfield road (south of B2192, i.e. Malling Hill)

However not all new development in the Submission Draft Core Strategy will be utilising the identified roads.



Identification of relevant development areas

2001 Census travel to work data (adjusted to suit current ward boundaries as shown below) was used to determine the relevant settlements to include in the study. Travel to work data provides an indication of the general strategic use of the road system.



Lewes District covers a large area and there are alternative strategic and local road systems available for many journeys. For robustness, the assessment of impacts of the Submission Draft Core Strategy on potential **affected roads** in the Lewes Downs SAC considers traffic movements caused by all significant potential growth in the district, as listed below. The housing figures in the table below are as advised by Lewes DC in late March 2014 as updates to the figures previously used. Those updates figures include 84 housing units listed as 'other areas' and 518 on windfall sites. The table figures below assume all 602 (84+518) are distributed across the named areas in proportion to the initial named area totals. All housing figures are from an April 2010 base and therefore include Completions since that date.

Lewes town	868
Ringmer	225
Newhaven	1648
Peacehaven	1020
Seaford	499
Wivelsfield (Greenhill Way)	175
Wivelsfield (Valebridge Road)	170
Wivelsfield Green	48
Newick	127
Plumpton Green	54
Barcombe Cross	31
Cooksbridge	37
North Chailey	34
South Chailey	14
Ditchling	25
Other	141

Windfall sites	518
TOTAL	5634

Allocating those to wards or urban areas (including distributing 'other' and 'windfall sites) to enable use of Census journey to work data, the assessment housing figures are:

Lewes (Bridge; Castle; Priory)	994
Ouse Valley and Ringmer	254
Newhaven (Denton & Meeching; Valley)	1862
Peacehaven (East; North; West; East Saltdean & Telscombe Cliffs)	1152
Seaford (Central; East; North; South; West)	564
Barcombe & Hamsey	77
Newick	144
Chailey & Wivelsfield	498
Plumpton, Streat, East Chiltington & St John (without) plus Ditchling & Westmeston	89
Kingston	0
TOTAL	5634

Assessment Process

The assessment has considered the increase in AADT on the identified affected roads that would arise from committed and possible future housing development in the identified relevant development areas. This was on the basis that, of the DMRB flow-related assessment criteria, only if this was exceeded would there be any possibility of an impact on the other criteria.

The study used the following 8 STEP process to estimate additional AADT traffic resulting from new development in the Submission Draft Core Strategy, identify which roads would be used, and quantify the cumulative impacts on the identified affected roads:

- **STEP 1**
Determine annual average (5-day) person commuter trips per household using Census journey to Work data (5 Day = Monday to Friday)

2001 Census Journey to Work (JTW) data (see Annex 2) gives figures for employed persons per household in each of the identified relevant settlements as:

Lewes	7580 / 7082
Ringmer	3001 / 2716
Newhaven	5200 / 4681
Peacehaven	9061 / 8939
Seaford	9083 / 10324
Barcombe & Hamsey	993/799
Newick	1179/942

Chailey & Wivelsfield	2407/1780
Plumpton etc	1091/844

Multiplying by 2 for return trips, and factoring by 0.9 to account for non-work weekdays (5 weeks non-work per year), the annual average (5-day) person commuter trips from existing development in the identified relevant settlements are:

Lewes	1.93 trips / HH
Ringmer	1.99 trips / HH
Newhaven	2.00 trips / HH
Peacehaven	1.82 trips / HH
Seaford	1.58 trips / HH
Barcombe & Hamsey	2.24 trips / HH
Newick	2.25 trips / HH
Chailey & Wivelsfield	2.43 trips / HH
Plumpton etc	2.33 trips / HH
Weighted average (urban)	1.91 trips / HH
Weighted average (rural)	2.34 trips / HH

Excluding Seaford, there are clearly two groups of results, each with little variation about their respective weighted average, but with significant differences between those weighted averages. The groups broadly represent larger urban and more rural areas. The weighted average for urban areas excludes Seaford which, if included, would increase the gap between urban and rural. Seaford shows a lower ratio of employed persons than other urban areas, more related to the current socio-economic characteristics of the town than is likely to be the case for new development. The assessment has therefore used either the urban or rural weighted average (as appropriate for any particular development) including use of the urban average in the assessment of new development in Seaford.

- **STEP 2**
Determine annual average (5-day) person total trips per household using the TRICS database.

TRICS gives estimates of person and vehicle trip rates (trips / housing unit). Person total trip rates can differ between urban and rural areas, as can the proportion of those trips by private vehicles. For mixed private / non-private residential development in larger urban areas TRICS gives a person trip rate of 7.344 trips / housing unit (generally equivalent to trips / household - HH) all modes, all purposes, over a 12 hour (0700-1900) average weekday. The equivalent average trip rate for vehicles in larger urban areas is 4.077 / HH. In rural areas the equivalent figures are 6.577 person trips / HH and 4.562 vehicle trips / HH. All TRICS data was derived using the latest version – TRICS 2012a v6.9.1. The detailed TRICS analysis is at Annex 1.

Using National Travel Survey Table NTS0503, the factor to growth 12 hour person trips (all purposes, all modes, weekdays) to 24 hour = 1.16.

Therefore annual average (5-day) person trip rate = $7.344 \times 1.16 = 8.52$ person trips / HH in larger urban areas, and $6.577 \times 1.16 = 7.62$ person trips / HH in rural areas.

- **STEP 3**

Calculate annual average (5-day) person non-commuter trips per household

Urban areas = $8.52 - 1.91 = 6.61$ trips / HH

Rural areas = $7.62 - 2.34 = 5.28$ trips / HH

- **STEP 4**

Convert commuter and non-commuter person trip rates from 5-day to 7-day (7-day = Monday to Sunday)

National Travel Survey Table NTS0504.gives ratios of annual average daily (5-day) person trip rate to annual average daily (7-day) person trip rates:

commuting = 0.80

non-commuting = 0.98

Annual average daily (7-day) person trip rates / HH are therefore:

Urban areas: commuting = $1.91 \times 0.80 = 1.53$

non-commuting = $6.61 \times 0.98 = 6.48$

Rural areas: commuting = $2.34 \times 0.80 = 1.50$

Non-commuting = $5.28 \times 0.98 = 5.17$

- **STEP 5** Convert STEP 4 figures to include only external 'strategic' trips.

Census JTW data, which would apply to commuter trips, shows the ratios between external and internal workplaces for employed residents in each of the identified areas are:

	External	Internal
Lewes	46%	54%
Ringmer	68%	32%
Newhaven	52%	48%
Peacehaven	70%	30%
Seaford	58%	42%
Barcombe & Hamsey	70%	30%
Newick	74%	26%
Chailey & Wivelsfield	72%	28%
Plumpton etc	67%	33%

Non-commuter trips would include a greater proportion of internal trips than commuter trips (because of school journeys, more walk and local cycle trips, local shopping and social trips etc). The proportion would vary by area depending on the internal availability of appropriate school, shopping and social provision.

The National Travel Survey (Tables NTS9906/7) shows that, for the South East region (and allowing for 50% of business trips to be home-based on any given day and therefore 'proxy' commuter), commuting trips comprise 16% of all trips and 25% of all distance travelled.

The average non-commuting trips would therefore have a distance travelled of 56.4% of the average commuter trip. Using that factor, adjusting the above external : internal relationships for commuter trips associated with each area, gives resultant ratios between external and internal non-commuter trips of:

	External	Internal
Lewes	26%	74%
Ringmer	38%	62%
Newhaven	29%	71%
Peacehaven	39%	61%
Seaford	33%	67%
Barcombe & Hamsey	39%	61%
Newick	42%	58%
Chailey & Wivelsfield	41%	59%
Plumpton etc	38%	62%

Annual average 7-day external, 'strategic' person trip rates are therefore:

	Commuting	Non-Commuting	TOTAL
Lewes	0.70	1.68	2.38
Ringmer	1.04	2.46	3.50
Newhaven	0.80	1.88	2.68
Peacehaven	1.07	2.53	3.60
Seaford	0.89	2.14	3.03
Barcombe & Hamsey	1.07	2.02	3.09
Newick	1.13	2.17	3.30
Chailey & Wivelsfield	1.10	2.12	3.22
Plumpton etc	1.03	1.96	2.99

- **STEP 6** Convert from person trip rates to vehicle trip rates (AADT)

Using TRICS data reported in STEP 1:

In urban areas:

TRICS person trip rate = 7.344 / HH

TRICS vehicle trip rate = 4.077 / HH

Therefore conversion from persons to vehicles = x 0.55

In rural areas:

TRICS person trip rate = 6.577/ HH

TRICS vehicle trip rate = 4.562 / HH

Therefore conversion from persons to vehicles = x 0.69

Therefore 'strategic' annual average daily vehicle (AADT) trip rates for use in this assessment are:

Lewes	2.38 x 0.55 = 1.31 vehicle trips / HH
Ringmer	3.50 x 0.55 = 1.93 vehicle trips / HH
Newhaven	2.68 x 0.55 = 1.47 vehicle trips / HH
Peacehaven	3.60 x 0.55 = 1.98 vehicle trips / HH
Seaford	3.03 x 0.55 = 1.67 vehicle trips / HH
Barcombe & Hamsey	3.09 x 0.69 = 2.13 vehicle trips / HH
Newick	3.30 x 0.69 = 2.28 vehicle trips / HH
Chailey & Wivelsfield	3.22 x 0.69 = 2.22 vehicle trips / HH
Plumpton etc	2.99 x 0.69 = 2.06 vehicle trips / HH

- **STEP 7** Calculate the total number of new 'strategic' vehicle trips (AADT) that would arise from the identified housing commitments and new development.

	Housing Units	trip rate	Vehicles (AADT)
Lewes	994	1.31	1302
Ringmer	254	1.93	490
Newhaven	1862	1.47	2737
Peacehaven	1152	1.98	1693
Seaford	564	1.67	942
Barcombe & Hamsey	77	2.13	164
Newick	144	2.28	328
Chailey & Wivelsfield	498	2.22	1106
Plumpton etc + Ditchling etc	89	2.06	183
TOTAL			8945

- **STEP 8** Assign strategic vehicle trips to the highway network

At the generally coarse District / County level of the known Census distribution of commuter trips, it is reasonable to assume that the distribution of workplaces is a good proxy for the distribution of shopping and social attractors, which comprise the bulk of external non-commuter trips. The same distribution is therefore assumed for both commuter and non-commuter trips.

Route choices are determined by use of Google Maps time and distance module, with the new 'strategic' trips manually assigned to the relevant highway network. Routeing assumptions are shown in Annex 3.

Assessment conclusions

The report has assessed development coming forward at the maximum levels considered in the Submission Draft Core Strategy. As a result of developing at this level, increases in traffic would therefore arise on the affected roads around the Lewes Downs Special Area Of Conservation (SAC); the A26 and the B2192.

Based on the assumptions above, increases in traffic on the affected roads within the Lewes Downs SAC are forecast to be:

SOURCE	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
	TOTAL	A26 s	A26n	B2192
Lewes town	196	196	84	112
Ringmer	325	325	24	301
Newhaven	187	187	136	51
Seaford	76	76	58	18
Peacehaven	62	62	43	19
Barcombe + Hamsey	14	14	4	10
Chailey + Wivelsfield	44	44	9	35
Newick	24	24	3	21
Plumpton etc + Ditchling	8	8	2	6
TOTAL	936	936	363	573

On none of the identified 'Affected Roads' would forecast increases in traffic flow as a result of the development proposals within the Submission Draft Core Strategy exceed the threshold of 1000 AADT set out in DMRB.

Appendix 1 - Annex 3

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

BARCOMBE AND HAMSEY

77 HH @ 2.13 'STRATEGIC' VEHICLE TRIPS / HH AADT = 164

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
						TOTAL	A26 s	A26n	B2192
eastbourne	15	<i>A275/A27 east of Lewes</i>	4	100	N				
hastings	0	<i>A275/A27 east of Lewes</i>	0	100	N				
lewes	293	NE of District (Ringmer) - A275/A26/Ham Lane	69	5	Y	4	4	4	
		NE of District (Ringmer) - A275/A26 / B2192		5	Y	4	4		4
		<i>S of District (Peacehaven / Newhaven / Seaford) - A275/A27 / A26</i>		30	N				
		<i>NW of District (Ditchling / Chailey) - local roads</i>		10	N				
		<i>Lewes town - A275</i>		50	N				
rother	6	<i>Bexhill / Battle (part) - A275/A27 east of Lewes</i>	1	50	N				
		Ticehurst / Wadhurst / Battle (part) - A275/A26 / B2192 etc		50	Y	1	1		1
wealden	64	<i>NW of District (Forest Row / Hartfield) - A275/A22</i>	15	10	N				
		<i>NE of District (Uckfield) - A272/A26</i>		15	N				
		<i>NE of District (Crowborough) - A272/A26</i>		15	N				
		Centre of District (Heathfield / Hailsham) - A275/A26 / B2192		30	Y	5	5		5
		<i>S of District (Polegate) - A275/A27 east of Lewes</i>		30	N				
brighton and hove	107	<i>A27 west of Lewes</i>	25	100	N				
sevenoaks	9	<i>A272/A26</i>	2	100	N				
tonbridge and malling	3	<i>A272/A26</i>	1	100	N				
tonbridge wells	0	<i>A272/A26</i>	0	100	N				
rest of kent	0	<i>A272/A26</i>	0	50	N				
		<i>A275/A26 / B2192</i>		50	Y	0	0		0
adur	9	<i>A27 west of Lewes</i>	2	100	N				
crawley	25	<i>local roads</i>	6	100	N				
horsham	3	<i>local roads</i>	1	100	N				
mid sussex	57	<i>local roads</i>	13	100	N				
worthing	3	<i>A27 west of Lewes</i>	1	100	N				
rest of west sussex	9	<i>A27 west of Lewes</i>	2	50	N				
		<i>A272</i>		50	N				
inner/central london	46	<i>100% by public transport</i>	11	100	N				
outer london	21	<i>100% by public transport</i>	5	100	N				
surrey	12	<i>A275 / A22</i>	3	50	N				
		<i>50% public transport</i>		50	N				
elsewhere in UK	12	<i>100% public transport</i>	3	100	N				
outside UK	0	<i>100% public transport</i>	0	100	N				
TOTAL	694		164			14	14	4	10

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

CHAILEY AND WIVELSFIELD

498 HH @ 2.22 'STRATEGIC' VEHICLE TRIPS / HH AADT = 1106

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
						TOTAL	A26 s	A26n	B2192
eastbourne	15	<i>A275/A27 east of Lewes</i>	10	100	N				
hastings	6	<i>A275/A27 east of Lewes</i>	4	100	N				
lewes	282	NE of District (Ringmer) - A275/A26/Ham Lane	181	5	Y	9	9	9	
		NE of District (Ringmer) - A275/A26 / B2192		5	Y	9	9		9
		<i>S of District (Peacehaven / Newhaven / Seaford) - A275/A27 / A26</i>		30	N				
		<i>NW of District (Ditchling / Chailey) - local roads</i>		10	N				
		<i>Lewes town - A275</i>		50	N				
rother	6	<i>Bexhill / Battle (part) - A275/A27 east of Lewes</i>	4	50	N				
		Ticehurst / Wadhurst / Battle (part) - A275/A26 / B2192 etc		50	Y	2	2		2
wealden	114	<i>NW of District (Forest Row / Hartfield) - A275/A22</i>	73	10	N				
		<i>NE of District (Uckfield) - A272/A26</i>		15	N				
		<i>NE of District (Crowborough) - A272/A26</i>		15	N				
		Centre of District (Heathfield / Hailsham) - A275/A26 / B2192		30	Y	22	22		22
		<i>S of District (Polegate) - A275/A27 east of Lewes</i>		30	N				
brighton and hove	140	<i>A27 west of Lewes</i>	90	100	N				
sevenoaks	3	<i>A272/A26</i>	2	100	N				
tonbridge and malling	0	<i>A272/A26</i>	0	100	N				
tunbridge wells	6	<i>A272/A26</i>	4	100	N				
rest of kent	6	<i>A272/A26</i>	4	50	N				
		A275/A26 / B2192		50	Y	2	2		2
adur	14	<i>A27 west of Lewes</i>	9	100	N				
crawley	155	<i>local roads</i>	99	100	N				
horsham	40	<i>local roads</i>	26	100	N				
mid sussex	596	<i>local roads</i>	383	100	N				
worthing	15	<i>A27 west of Lewes</i>	10	100	N				
rest of west sussex	6	<i>A27 west of Lewes</i>	4	50	N				
		<i>A272</i>		50	N				
inner/central london	181	<i>100% by public transport</i>	116	100	N				
outer london	62	<i>100% by public transport</i>	40	100	N				
surrey	40	<i>A275 / A22</i>	25	50	N				
		<i>50% public transport</i>		50	N				
elsewhere in UK	24	<i>100% public transport</i>	15	100	N				
outside UK	11	<i>100% public transport</i>	7	100	N				
TOTAL	1722		1106			44	44	9	35

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

PLUMPTON etc + DITCHLING

89 HH @ 2.06 'STRATEGIC' VEHICLE TRIPS / HH AADT = 183

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
						TOTAL	A26 s	A26n	B2192
eastbourne	15	<i>A275/A27 east of Lewes</i>	4	100	N				
hastings	3	<i>A275/A27 east of Lewes</i>	1	100	N				
lewes	158	NE of District (Ringmer) - A275/A26/Ham Lane	40	5	Y	2	2	2	
		NE of District (Ringmer) - A275/A26 / B2192		5	Y	2	2		2
		<i>S of District (Peacehaven / Newhaven / Seaford) - A275/A27 / A26</i>		30	N				
		<i>NW of District (Ditchling / Chailey) - local roads</i>		10	N				
		<i>Lewes town - A275</i>		50	N				
rother	9	<i>Bexhill / Battle (part) - A275/A27 east of Lewes</i>	2	50	N				
		Ticehurst / Wadhurst / Battle (part) - A275/A26 / B2192 etc		50	Y	1	1		1
wealden	41	<i>NW of District (Forest Row / Hartfield) - A275/A22</i>	10	10	N				
		<i>NE of District (Uckfield) - A272/A26</i>		15	N				
		<i>NE of District (Crowborough) - A272/A26</i>		15	N				
		Centre of District (Heathfield / Hailsham) - A275/A26 / B2192		30	Y	3	3		3
		<i>S of District (Polegate) - A275/A27 east of Lewes</i>		30	N				
brighton and hove	79	<i>A27 west of Lewes</i>	20	100	N				
sevenoaks	0	<i>A272/A26</i>	0	100	N				
tonbridge and malling	0	<i>A272/A26</i>	0	100	N				
tunbridge wells	3	<i>A272/A26</i>	1	100	N				
rest of kent	0	<i>A272/A26</i>	0	50	N				
		<i>A275/A26 / B2192</i>		50	Y	0	0		0
adur	3	<i>A27 west of Lewes</i>	1	100	N				
crawley	56	<i>local roads</i>	14	100	N				
horsham	9	<i>local roads</i>	2	100	N				
mid sussex	214	<i>local roads</i>	53	100	N				
worthing	4	<i>A27 west of Lewes</i>	1	100	N				
rest of west sussex	6	<i>A27 west of Lewes</i>	1	50	N				
		<i>A272</i>		50	N				
		<i>100% by public transport</i>	22	100	N				
inner/central london	90	<i>100% by public transport</i>	22	100	N				
outer london	12	<i>100% by public transport</i>	3	100	N				
surrey	21	<i>A275 / A22</i>	5	50	N				
		<i>50% public transport</i>		50	N				
elsewhere in UK	9	<i>100% public transport</i>	3	100	N				
outside UK	0	<i>100% public transport</i>	0	100	N				
TOTAL	732		183			8	8	2	6

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

LEWES TOWN

994 HH @ 1.31 'STRATEGIC' VEHICLE TRIPS / HH AADT = 1302

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
						TOTAL	A26 s	A26n	B2192
eastbourne	111	<i>A27 east of Lewes</i>	41	100	N				
hastings	33	<i>A27 east of Lewes</i>	12	75	N				
		<i>A26 / B2192 / A22 / A271 etc</i>		25	Y	3	3		3
lewes	655	NE of District (Ringmer) - A26/Ham Lane	243	5	Y	12	12	12	
		NE of District (Ringmer) - A26 / B2192		25	Y	61	61		61
		<i>S of District (Peacehaven / Newhaven / Seaford) - A27 / A26</i>		60	N				
		<i>NW of District (Ditchling / Chailey) - A275</i>		10	N				
rother	30	<i>Bexhill / Battle (part) - A27 east of Lewes</i>	11	50	N				
		Ticehurst / Wadhurst / Battle (part) - A26 / B2192 etc		50	Y	6	6		6
wealden	352	<i>NW of District (Forest Row area) - A275/A22</i>	130	5	N				
		NW of District (Hartfield area) - A26/A22/B2026		5	Y	7	7	7	
		NE of District (Uckfield) - A26		15	Y	20	20	20	
		NE of District (Crowborough) - A26		15	Y	20	20	20	
		Centre of District (Heathfield / Hailsham) - A26 / B2192		30	Y	39	39		39
		<i>S of District (Polegate) - A27 east of Lewes</i>		30	N				
brighton and hove	1118	<i>A27 west of Lewes</i>	414	100	N				
sevenoaks	6	A26	2	100	Y	2	2	2	
tonbridge and malling	9	A26	3	100	Y	3	3	3	
tunbridge wells	46	A26	17	100	Y	17	17	17	
rest of kent	15	A26	6	50	Y	3	3	3	
		<i>A26 / B2192</i>		50	Y	3	3		3
adur	39	<i>A27 west of Lewes</i>	15	100	N				
crawley	138	<i>A275 towards A23 etc</i>	51	100	N				
horsham	51	<i>A275 towards A23 etc</i>	19	100	N				
mid sussex	205	<i>A275 towards A23 etc</i>	76	100	N				
worthing	66	<i>A27 west of Lewes</i>	25	100	N				
rest of west sussex	12	<i>A27 west of Lewes</i>	4	50	N				
		<i>A275/A272</i>		50	N				
inner/central london	423	<i>100% by public transport</i>	157	100	N				
outer london	83	<i>100% by public transport</i>	31	100	N				
surrey	45	<i>A275 / A22</i>	17	50	N				
		<i>50% public transport</i>		50	N				
elsewhere in UK	60	<i>100% by public transport</i>	22	100	N				
outside UK	17	<i>100% by public transport</i>	6	100	N				
TOTAL	3514		1302			196	196	84	112

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

RINGMER 254 HH @ 1.93 'STRATEGIC' VEHICLE TRIPS / HH AADT = 490

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
						TOTAL	A26 s	A26n	B2192
eastbourne	47	<i>A27 (via Glynde) or B2124</i> <i>B2124</i>	11	50	N				
hastings	9	<i>A27 (via Glynde) or B2124</i> <i>B2124</i>	2	50	N				
lewes	991	NW of District (Ditchling / Chailey) - B2192/A26/A275 S of District (Peacehaven / Newhaven / Seaford) - B2192 / A27 / A26s <i>S of District (Peacehaven / Newhaven / Seaford) - Glynde / A26s</i> Lewes town - B2192 / A26 Lewes town - Ham Lane / A26	239	10	Y	24	24		24
				25	Y	60	60		60
				25	N				
				30	Y	72	72		72
				10	Y	24	24	24	
rother	6	<i>B2192 east of Ringmer or via Glynde / A27</i>	1	100	N				
wealden	276	<i>NW of District (Forest Row area) - A275/A22</i> <i>NW of District (Hartfield area) - A26/A22/B2026</i> <i>NE of District (Uckfield) - A26</i> <i>NE of District (Crowborough) - A26</i> <i>Centre of District (Heathfield / Hailsham) - A26 / B2192</i> <i>S of District (Polegate) - B2192 east or A27 east of Lewes</i>	67	0	N				
				10	N				
				15	N				
				15	N				
				30	N				
				30	N				
brighton and hove	344	B2192 / A26 / A27 west of Lewes	83	100	Y	83	83		83
sevenoaks	3	A26	1	100	N				
tonbridge and malling	0	A26	0	100	N				
tunbridge wells	9	A26	2	100	N				
rest of kent	6	A26 <i>B2192 east of Ringmer</i>	1	50	N				
				50	N				
adur	16	B2192 / A26 / A27 west of Lewes	4	100	Y	4	4		4
crawlley	40	B2192 / A26 / A275 towards A23 <i>A26 / A22</i>	10	50	Y	5	5		5
				50	N				
horsham	3	B2192 / A26 / A275 towards A23	1	100	Y	1	1		1
mid sussex	85	B2192 / A26 / A275 towards A23	20	100	Y	20	20		20
worthing	9	B2192 / A26 / A27 west of Lewes	2	100	Y	2	2		2
rest of west sussex	0	B2192 / A26 / A27 west of Lewes B2192 / A26 / A275 towards A23	0	50	Y	0	0		0
				50	Y	0	0		0
inner/central london	74	100% by rail with 75% using Lewes station (B2192/A26)	18	75	Y	14	14		14
outer london	38	100% by rail with 75% using Lewes station (B2192/A26)	9	75	Y	7	7		7
surrey	30	A26/A22	7	100	N				
elsewhere in UK	33	100% by rail with 75% using Lewes station (B2192/A26)	8	75	Y	6	6		6
outside UK	16	100% by rail with 75% using Lewes station (B2192/A26)	4	75	Y	3	3		3
TOTAL	2035		490			325	325	24	301

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

NEWHAVEN

1862 HH @ 1.47 'STRATEGIC' VEHICLE TRIPS / HH AADT = 2737

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
						TOTAL	A26 s	A26n	B2192
eastbourne	114	<i>A27 east of Lewes</i>	116	50	N				
		<i>A259</i>		50	N				
hastings	12	<i>A26/A27 east of Lewes</i>	12	75	N				
		<i>A259</i>		25	N				
lewes	1006	<i>NW of District (Dithclug/Chailey) - A26/A27/A275</i>	1021	10	N				
		<i>S of District (Peacehaven / Seaford) - A259</i>		60	N				
		<i>Lewes town - A26/A27/A26</i>		10	N				
		<i>Ringmer via A26/A27/Glynde</i>		10	N				
		<i>Ringmer via A26/A27/A26/B2192</i>		5	Y	51	51	51	
		<i>Ringmer via A26/A27/A26/Ham Lane</i>		5	Y	51	51		51
rother	27	<i>A26/A27 east of Lewes</i>	27	75	N				
		<i>A259</i>		25	N				
wealden	139	<i>NW of District (Forest Row area) - A275/A22</i>	141	0	N				
		<i>NW of District (Hartfield area) - A26/A22/B2026</i>		10	Y	14	14	14	
		<i>NE of District (Uckfield) - A26</i>		15	Y	21	21	21	
		<i>NE of District (Crowborough) - A26</i>		15	Y	21	21	21	
		<i>Centre of District (Heathfield / Hailsham) - A27 east</i>		30	N				
		<i>S of District (Polegate) - A27 east of Lewes</i>		30	N				
brighton and hove	804	<i>A259</i>	816	35	N				
		<i>A26/A27</i>		35	N				
		<i>public transport</i>		30	N				
sevenoaks	0	<i>A26/A27/A26</i>	0	100	Y	0	0	0	
tonbridge and malling	3	<i>A26/A27/A26</i>	3	100	Y	3	3	3	
tunbridge wells	15	<i>A26/A27/A26</i>	15	100	Y	15	15	15	
rest of kent	21	<i>A26/A27/A26</i>	21	50	Y	11	11	11	
		<i>A26/A27east</i>		50	N				
adur	50	<i>A26/A27 west of Lewes</i>	51	100	N				
crawley	106	<i>A26/A27/A275 towards A23 etc</i>	108	100	N				
horsham	21	<i>A26/A27/A275 towards A23 etc</i>	21	100	N				
mid sussex	109	<i>A26/A27/A275 towards A23 etc</i>	111	100	N				
worthing	30	<i>A26/A27 west of Lewes</i>	31	100	N				
rest of west sussex	0	<i>A26/A27 west of Lewes</i>	0	50	N				
inner/central london	81	<i>100% by public transport</i>	82	100	N				
outer london	51	<i>100% by public transport</i>	52	100	N				
surrey	36	<i>A26/A275 / A22</i>	36	50	N				
		<i>50% public transport</i>		50	N				
elsewhere in UK	63	<i>100% public transport</i>	64	100	N				
outside UK	9	<i>100% public transport</i>	9	100	N				
TOTAL	2697		2737			187	187	136	51

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

SEAFORD

564 HH @ 1.67 'STRATEGIC' VEHICLE TRIPS / HH AADT = 942

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
						TOTAL	A26 s	A26n	B2192
eastbourne	536	<i>A27 east of Lewes</i>	95	20	N				
		<i>A259</i>		80	N				
hastings	48	<i>A26/A27 east of Lewes</i>	9	20	N				
		<i>A259</i>		80	N				
lewes	1995	<i>NW of District (Dithcling/Chailey) - A26/A27/A275</i>	355	5	N				
		<i>S of District (Peacehaven / Seaford) - A259</i>		60	N				
		<i>Lewes town - A26/A27/A26</i>		10	N				
		<i>Ringmer via A26/A27/Glynde</i>		10	N				
		<i>Ringmer via A26/A27/A26/B2192</i>		5	Y	18	18		18
		<i>Ringmer via A26/A27/A26/Ham Lane</i>		5	Y	18	18	18	
rother	48	<i>A26/A27 east of Lewes</i>	9	75	N				
		<i>A259</i>		25	N				
wealden	396	<i>NW of District (Forest Row area) - A275/A22</i>	71	0	N				
		<i>NW of District (Hartfield area) - A26/A22/B2026</i>		10	Y	7	7	7	
		<i>NE of District (Uckfield) - A26</i>		15	Y	11	11	11	
		<i>NE of District (Crowborough) - A26</i>		15	Y	11	11	11	
		<i>Centre of District (Heathfield / Hailsham) - A27 east</i>		30	N				
		<i>S of District (Polegate) - A27 east of Lewes</i>		30	N				
brighton and hove	1018	<i>A259</i>	181	35	N				
		<i>A26/A27</i>		35	N				
		<i>public transport</i>		30	N				
sevenoaks	15	<i>A26/A27/A26</i>	3	100	Y	3	3	3	
tonbridge and malling	3	<i>A26/A27/A26</i>	0	100	Y	0	0	0	
tunbridge wells	33	<i>A26/A27/A26</i>	6	100	Y	6	6	6	
rest of kent	24	<i>A26/A27/A26</i>	4	50	Y	2	2	2	
		<i>A26/A27east</i>		50	N				
adur	91	<i>A26/A27 west of Lewes</i>	16	100	N				
crawley	167	<i>A26/A27/A275 towards A23 etc</i>	30	100	N				
horsham	57	<i>A26/A27/A275 towards A23 etc</i>	10	100	N				
mid sussex	232	<i>A26/A27/A275 towards A23 etc</i>	41	100	N				
worthing	18	<i>A26/A27 west of Lewes</i>	3	100	N				
rest of west sussex	18	<i>A26/A27 west of Lewes</i>	3	50	N				
inner/central london	237	<i>100% by public transport</i>	42	100	N				
outer london	110	<i>100% by public transport</i>	20	100	N				
surrey	99	<i>A26/A275 / A22</i>	18	50	N				
		<i>50% public transport</i>		50	N				
elsewhere in UK	123	<i>100% public transport</i>	22	100	N				
outside UK	23	<i>100% public transport</i>	4	100	N				
TOTAL	5291		942			76	76	58	18

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

LEWES DOWNS SAC HABITATS REGULATIONS ASSESSMENT - MARCH 2014 UPDATE

PEACEHAVEN

1152 HH @ 1.47 'STRATEGIC' VEHICLE TRIPS / HH AADT = 1693

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	RELEVANT		ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS			
				% BY EACH ROUTE	Y/N	TOTAL	A26 s	A26n	B2192
eastbourne	111	<i>A27 east of Lewes</i>	29	50	N				
		<i>A259</i>		50	N				
hastings	15	<i>A26/A27 east of Lewes</i>	4	75	N				
		<i>A259</i>		25	N				
lewes	1425	<i>NW of District (Dithcling/Chailey) - A26/A27/A275</i>	379	5	N				
		<i>S of District (Peacehaven / Seaford) - A259</i>		60	N				
		<i>Lewes town - A26/A27/A26</i>		10	N				
		<i>Ringmer via A26/A27/Glynde</i>		10	N				
		<i>Ringmer via A26/A27/A26/B2192</i>		5	Y	19	19	19	
		<i>Ringmer via A26/A27/A26/Ham Lane</i>		5	Y	19	19		19
rother	15	<i>A26/A27 east of Lewes</i>	4	75	N				
		<i>A259</i>		25	N				
wealden	101	<i>NW of District (Forest Row area) - A275/A22</i>	27	0	N				
		<i>NW of District (Hartfield area) - A26/A22/B2026</i>		10	Y	3	3	3	
		<i>NE of District (Uckfield) - A26</i>		15	Y	4	4	4	
		<i>NE of District (Crowborough) - A26</i>		15	Y	4	4	4	
		<i>Centre of District (Heathfield / Hailsham) - A27 east</i>		30	N				
brighton and hove	3496	<i>S of District (Polegate) - A27 east of Lewes</i>	929	30	N				
		<i>A259</i>		70	N				
		<i>A26/A27</i>		0	N				
		<i>public transport</i>		30	N				
sevenoaks	3	<i>A26/A27/A26</i>	1	100	Y	1	1	1	
tonbridge and malling	15	<i>A26/A27/A26</i>	4	100	Y	4	4	4	
tunbridge wells	18	<i>A26/A27/A26</i>	5	100	Y	5	5	5	
rest of kent	24	<i>A26/A27/A26</i>	6	50	Y	3	3	3	
		<i>A26/A27east</i>		50	N				
adur	123	<i>A26/A27 west of Lewes</i>	33	100	N				
crawley	224	<i>A26/A27/A275 towards A23 etc</i>	59	100	N				
horsham	58	<i>A26/A27/A275 towards A23 etc</i>	15	100	N				
mid sussex	185	<i>A26/A27/A275 towards A23 etc</i>	49	100	N				
worthing	58	<i>A26/A27 west of Lewes</i>	15	100	N				
rest of west sussex	3	<i>A26/A27 west of Lewes</i>	1	50	N				
inner/central london	146	<i>100% by public transport</i>	39	100	N				
outer london	113	<i>100% by public transport</i>	30	100	N				
surrey	85	<i>A26/A275 / A22</i>	23	50	N				
		<i>50% public transport</i>		50	N				
elsewhere in UK	138	<i>100% public transport</i>	37	100	N				
outside UK	17	<i>100% public transport</i>	4	100	N				
TOTAL	6373		1693			62	62	43	19

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

**ADDITIONAL TRAFFIC (AADT)
USING AFFECTED ROADS**

SOURCE	TOTAL	A26 s	A26n	B2192
Lewes town	196	196	84	112
Ringmer	325	325	24	301
Newhaven	187	187	136	51
Seaford	76	76	58	18
Peacehaven	62	62	43	19
Barcombe + Hamsey	14	14	4	10
Chailey + Wivelsfield	44	44	9	35
Newick	24	24	3	21
Plumpton etc + Ditchling	8	8	2	6
TOTAL	936	936	363	573

Appendix 2 – Emissions at Lewes Downs SAC

1.1 Background

Assessing the significance of nitrogen emissions on protected sites requires us to find the process contribution of emissions as a percentage of critical loads. If the percentage of the process contribution is less than 1% of the critical load, it can be assumed that there will be no significant effect.

1.2 Critical Loads

The Air Pollution Information System (APIS) has been used to identify the Critical Loads at the Lewes Downs SAC in terms of Nutrient Nitrogen (Eutrophication) and Acidity (Acidification), as shown in the table below:

Appendix 2 Table 1: Critical Loads at Lewes Downs SAC

Deposition	Critical Load
Nutrient Nitrogen	15 Kg N/ha/yr
Acidity	0.856 keq

1.3 Using the DMRB Screening Method

The Design Manual for Roads and Bridges (DMRB) Screening Method allows for local air quality to be calculated on roads. It has been used in this instance to see how the additional trips generated by the Core Strategy will increase emissions on the affected roads around the Lewes Downs SAC.

The method relies on a number of assumptions, which are then used to calculate emissions. The method has assumed that the Core Strategy will deliver 954 AADT on the A26 and 583 AADT on the B2192 as concluded in the ESCC report (Appendix 1). Other assumptions used are shown below:

Appendix 2 Table 2: Distance from Road to Lewes Downs SAC at nearest point

Road	Estimated Distance (m)
A26	15
B2192	80

Appendix 2 Table 3: Traffic Composition Assumptions from 2011 Lewes Transport Model Vehicles <3.5t

% Passenger Cars	Light Goods Vehicles
86.9	8.3

Appendix 2 Table 4: Traffic Composition Assumptions from 2011 Lewes Transport Model Vehicles >3.5t

Buses and Coaches	Rigid HGV	Articulate HGV
0.5	2.15	2.15

Appendix 2 Table 5: Dry Deposition Velocities for Grassland

Chemical Species	Grassland Deposition Velocity (m/s)
NO ₂	0.0015

Appendix 2 Table 6: Conversion Factors

Chemical Species	Conversion factor $\mu\text{g}/\text{m}^2/\text{s}$ of N to Kg N/ha/year
NO ₂	96

Appendix 2 Table 7: Conversion Factors

Chemical Species	Conversion factor Kg N/ha/year
N	0.071428

1.4 Calculations of emissions on A26

For the A26 link, we undertook the calculations for the part of the A26 which lies closest to the SAC by inputting the above information into the DMRB Screening Method. Sensitivity analysis took place looking at the effect of more movements at different average speeds between 24km/h and 48km/h (15-30m/h). This is shown in the table below.

Appendix 2 Table 8: Emissions at closest point on A26 at Lewes Downs SAC

Speed at A26	Emissions (NO_x $\mu\text{g}/\text{m}^3$)
24	0.75
30	0.70
36	0.66
42	0.64
48	0.63

As can be seen, the largest additional contribution occurs if the average speed is 24km/h where emissions are $0.75\text{NO}_x \mu\text{g}/\text{m}^3$. Whilst the average speed is not known, 24km/h (15m/h) is considered pessimistic. Nevertheless, considering the 'precautionary principle', this speed provides the basis for the following calculations.

1.4.1 Nitrogen Critical Loads

Critical Loads for Nutrient Nitrogen are considered in Kg N/ha/year. Therefore the result of the DMRB Screening Method ($0.76 \text{NO}_x \mu\text{g}/\text{m}^3$) requires conversion. To do this, the result gets multiplied by the conversion factors listed in Appendix 2 Tables 5 and 6 and is shown in the calculation below.

- $0.75 \times 0.0015 \times 96 = 0.108 \text{ Kg N/ha/yr}$

To express this as a percentage of the Critical Load, the answer has been divided by 15 (the Critical Load) and multiplied by 100 below.

- $(0.108/15) \times 100 = 0.72\%$

As the Core Strategy adds less than 1% of the critical load for Nitrogen, the effect is not considered significant.

1.4.2 Acidity Critical Loads

Critical Loads for acidity are considered in keq. Therefore the result of 0.10944 Kg N/ha/yr requires conversion. To do this, the result is multiplied by the conversion factor listed in Appendix 2 Table 7.

- $0.108 \times 0.071428 = 0.00771422$

To express this as a percentage of the Critical Load, the answer has been divided by 0.856 (the Critical Load) and multiplied by 100 below.

- $(0.00771422 / 0.856) \times 100 = 0.90119439\%$

As the Core Strategy adds less than 1% of the critical load, the effect is not considered significant.

1.5 Calculations of emissions on B2192

For the B2192 link, we undertook the calculations for the part of the B2192 which lies closest to the SAC by inputting the required information into the DMRB Screening Method. Sensitivity analysis took place looking at the effect of more movements at different average speeds between 48km/h and 96km/h (30-60m/h). This is shown in the table below.

Appendix 2 Table 8: Emissions at closest point on B2192 at Lewes Downs SAC

Speed at B2192	Emissions (NO_x µg/m³)
48	0.08
60	0.08
72	0.08
84	0.08
96	0.09

As can be seen, the largest additional contribution occurs if the average speed is 96km/h where emissions are 0.09NO_x µg/m³. Whilst the average speed is not known, it is considered that this average speed is unlikely. Nevertheless, considering the 'precautionary principle', this speed provides the basis for the following calculations.

1.5.1 Nitrogen Critical Loads

Critical Loads for Nutrient Nitrogen are considered in Kg N/ha/year. Therefore the result of the DMRB Screening Method (0.09 NO_x µg/m³) requires conversion. To do this, the result gets multiplied by the conversion factors listed in Appendix 1 Tables 5 and 6 and is shown in the calculation below.

- $0.09 \times 0.0015 \times 96 = 0.01296$ Kg N/ha/yr

To express this as a percentage of the Critical Load, the answer has been divided by 15 (the Critical Load) and multiplied by 100 below.

- $(0.01296 / 15) \times 100 = 0.0864\%$

As the Core Strategy adds less than 1% of the critical load for Nitrogen, the effect is not considered significant.

1.5.2 Acidity Critical Loads

Critical Loads for acidity are considered in keq. Therefore the result of 0.01296 Kg N/ha/yr requires conversion. To do this, the result is multiplied by the conversion factor listed in Appendix 2 Table 7.

- $0.01296 * 0.071428 = 0.00092571$

To express this as a percentage of the Critical Load, the answer has been divided by 0.856 (the Critical Load) and multiplied by 100 below.

- $(0.00092571 / 0.856) * 100 = 0.10814333\%$

As the Core Strategy adds less than 1% of the critical load, the effect is not considered significant.

Appendix 3 – Traffic Increases at Ashdown Forest SAC/SPA

Lewes District Council Emerging Core Strategy

Habitats Regulations Assessment

An assessment of the significance of increases in traffic resulting from the Lewes District Submission Draft Core Strategy on the Ashdown Forest Special Protection Area / Special Area of Conservation (SPA/SAC).

SECOND UPDATE late MARCH 2014

DRAFT

R New
East Sussex County Council **CET**

FINAL **25 March 2014**

Introduction

In early 2011 Lewes District Council, with guidance from Natural England, undertook an Appropriate Assessment Screening Opinion¹ on the potential affect that the Core Strategy, being prepared by Lewes District Council and South Downs National Park Authority, could have on protected European sites.

Among other things, the Screening Opinion concluded that, based on the information at that time, it was not possible to determine that the Core Strategy would not cause a significant effect on the Ashdown Forest Special Protection Area (SPA) / Special Area Of Conservation (SAC) due to the pollution caused by vehicles from additional development. Thus, using the precautionary principle, further work was needed to examine the impact of the Core Strategy on the Ashdown Forest SPA/SAC.

This paper investigates the amount of traffic likely to be generated by development on roads near to the Ashdown Forest SPA/SAC if development came forward at levels suggested in the Submission Draft Core Strategy. It concludes by considering whether the resulting increased traffic would have a significant effect on the Ashdown Forest SPA/SAC. The findings of the report will help the District Council in determining future amounts and locations of new development.

This report update incorporates revised housing numbers supplied by Lewes District Council in March 2014.

¹ Found here: http://www.lewes.gov.uk/Files/plan_AAscreening.pdf

Background

Sites

The European sites within the scope of the assessment are:

- Ashdown Forest SPA/SAC: European dry heaths and North Atlantic wet heaths.

Air pollution types

The main pollutant effects of interest are acid deposition and eutrophication by nitrogen deposition.

Acid deposition: caused by oxides of nitrogen (NO_x) (or sulphur dioxide, SO_2) reacting with rain/cloudwater to form nitric (or sulphuric) acid, and is caused primarily by energy generation, as well as road traffic and industrial combustion. Both wet and dry acid deposition have been implicated in the damage and destruction of vegetation (heather, mosses, liverworts and lichens are particularly susceptible to cell membrane damage due to excessive pollutant levels) and in the degradation of soils and watercourses (including acidification and reduced microbial activity).

Eutrophication by nitrogen deposition: consists of the input of nitrogen from NO_x (and sometimes ammonia, NH_3) emissions by deposition, and is caused primarily by road traffic, as well as energy generation, industrial combustion and agricultural practices. Nitrogen deposition can cause direct damage to heather, mosses, liverworts and lichens, as well as other plant species, because of their sensitivity to additional atmospheric nitrogen inputs, whilst deposition can also lead to long term compositional changes in vegetation and reduced diversity.

Furthermore, while plants are able to detoxify and assimilate low exposure to *atmospheric concentrations of NO_x* , high levels of uptake can lead to detrimental impacts including:

- Inhibition of pigment biosynthesis, leading to reduced rates of photosynthesis;
- Water soaking as NO_2 molecules attach to lipids in membranes, causing plasmolysis (removal of water) and eventually necrosis;
- Inhibition of lipid biosynthesis, leading to reduced rates of regeneration and growth;
- Injury to mitochondria and plastids, essential to internal processing of energy and proteins;
- Decrease in stomatal conductance of air and water vapour; and
- Inhibition of CO_2 fixation (at least under low light levels).

Nitrogen plays an important role in all three impact mechanisms. Sulphur dioxide emissions, which have decreased significantly in the UK over the last two to three decades through tighter regulation, are generally associated with centralised power generation, while ammonia emissions are largely related to agricultural sources and some industrial processes. The Submission Draft Core Strategy does not promote new energy generation facilities or significant changes to District's agricultural economy.

Over half of all emissions of nitrogen and nitrogen oxides in the UK are the result of vehicle exhausts, with an estimated 92% of those associated with residential development being contributed by road traffic (Dore *et al*, 2005). Nitrogen emissions from traffic generated by residential and commercial developments will therefore be the focus of this part of the assessment.

Guidance

The Design Manual for Roads and Bridges² (DMRB) provides guidance on the assessment of the impact that road projects may have on local air quality. Specific provision is made in relation to sites designated pursuant to the Habitats Directive. The DMRB usually relates to proposed new roads.

However the guidance clarifies that "*where appropriate, the advice may be applied to existing roads.*" Thus, in accordance with this guidance and with the agreement of Natural England, this study examines whether there is a likely significant effect on the Lewes Downs SAC, using the DMRB guidance.

DMRB provides a scoping assessment for local air quality and initially requires the identification of roads which are likely to be affected by the proposals. The criteria for defining an **affected road** are:

- road alignment will change by 5 metres or more; or
- daily traffic flows will change by 1000 Annual Average Daily Trips (AADT) or more; or
- Heavy Duty Vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10km/hr or more; or
- Peak hour speed will change by 20km/hr or more.

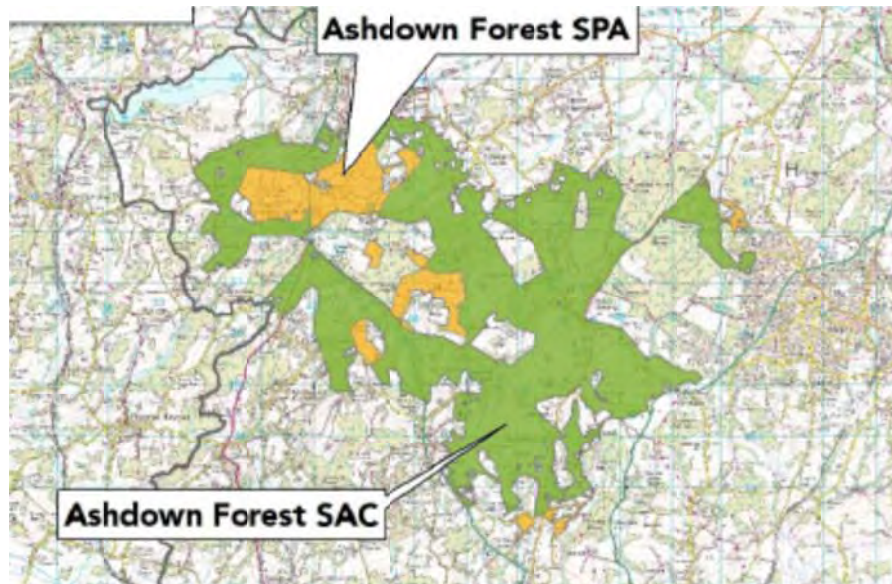
The scoping assessment then requires that nature conservation sites within 200 metres of the road and their characteristics be identified (including SACs and Special Protection Areas). The guidance then clarifies that if none of the roads in the network meet the traffic / alignment criteria (that is they are not affected roads) **or** there are no relevant designated sites near the **affected roads**, then the impact of the scheme can be considered neutral in terms of local air quality and no further work is needed.

² HA 207/07

Study Methodology

Affected roads

There are a number of roads crossing the Ashdown Forest within 200m of the SPA/SAC, and therefore potentially **affected roads**, as shown in the plan below.



The routes across the Forest, and bordering the SPA/SAC, include parts of:

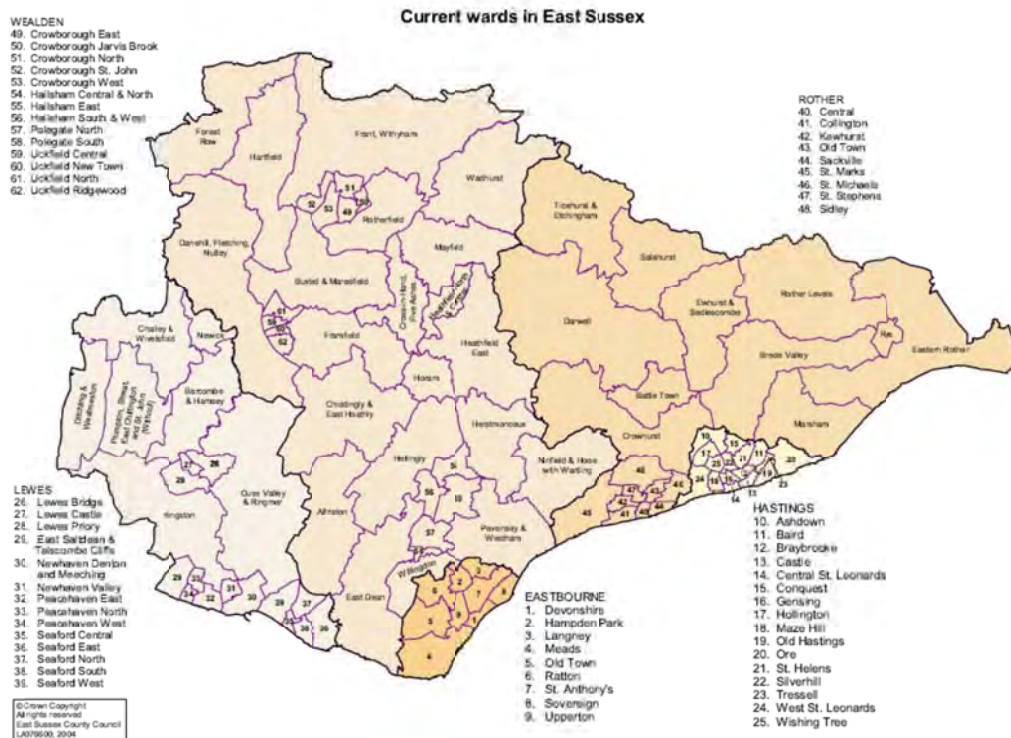
St Johns Road, Crowborough
Mardens Hill, Crowborough
B2188
B2026
A26
Crowborough Road (A22 / Duddleswell crossroads / A26)
Toll Lane
A22
A275
Legsheath Road
Priors Road
Lewes Road
Plawhatch Lane
Colemans Hatch Road
Kidds Hill
Roads at Chuck Hatch

However not all of those roads would be utilised by new development in the Submission Draft Core Strategy. Potential **affected roads** will be those serving north/south (& vice versa) traffic movements. Those are:

A22, A26, A275, B2026

Identification of relevant development areas

2001 Census travel to work data (adjusted to suit current ward boundaries as shown below) was used to determine the relevant settlements to include in the study. Travel to work data provides an indication of the general strategic use of the road system.



Lewes District covers a large area and there are alternative strategic and local road systems available for many journeys. For robustness, the assessment of impacts of the Submission Draft Core Strategy on potential **affected roads** in the Ashdown Forest SPA/SAC considers traffic movements caused by all significant potential growth in the district, as listed below. The housing figures in the table below are as advised by Lewes DC in late March 2014 as updates to the figures previously used. Those updated figures include 84 housing units listed as 'other areas' and 518 on windfall sites. The table figures below assume all 602 (84+518) are distributed across the named areas in proportion to the initial named area totals. All housing figures are from an April 2010 base and therefore include Completions since that date.

Lewes town	868
Ringmer	225
Newhaven	1648
Peacehaven	1020
Seaford	499
Wivelsfield (Greenhill Way)	175
Wivelsfield (Valebridge Road)	170
Wivelsfield Green	48
Newick	127
Plumpton Green	54
Barcombe Cross	31
Cooksbridge	37
North Chailey	34
South Chailey	14
Ditchling	25
Other	141
Windfall sites	518
TOTAL	5634

Allocating those to wards or urban areas (including distributing 'other' and 'windfall' sites) to enable use of Census journey to work data, the assessment housing figures are:

Lewes (Bridge; Castle; Priory)	994
Ouse Valley and Ringmer	254
Newhaven (Denton & Meeching; Valley)	1862
Peacehaven (East; North; West; East Saltdean & Telscombe Cliffs)	1152
Seaford (Central; East; North; South; West)	564
Barcombe & Hamsey	77
Newick	144
Chailey & Wivelsfield	498
Plumpton, Streat, East Chiltington & St John (without) plus Ditchling & Westmeston	89
Kingston	0
TOTAL	5634

Assessment Process

The assessment has considered the increase in AADT on the identified affected roads that would arise from committed and possible future housing development in the identified relevant development areas. This was on the basis that, of the DMRB flow-related assessment criteria, only if this was exceeded would there be any possibility of an impact on the other criteria.

The study used the following 8 STEP process to estimate additional AADT traffic resulting from new development in the Submission Draft Core Strategy, identify which roads would be used, and quantify the cumulative impacts on the identified affected roads:

- **STEP 1**

Determine annual average (5-day) person commuter trips per household using Census journey to Work data (5 Day = Monday to Friday)

2001 Census Journey to Work (JTW) data (see Annex 2) gives figures for employed persons per household in each of the identified relevant settlements as:

Lewes	7580 / 7082
Ringmer	3001 / 2716
Newhaven	5200 / 4681
Peacehaven	9061 / 8939
Seaford	9083 / 10324
Barcombe & Hamsey	993/799
Newick	1179/942
Chailey & Wivelsfield	2407/1780
Plumpton etc	1091/844

Multiplying by 2 for return trips, and factoring by 0.9 to account for non-work weekdays (5 weeks non-work per year), the annual average (5-day) person commuter trips from existing development in the identified relevant settlements are:

Lewes	1.93 trips / HH
Ringmer	1.99 trips / HH
Newhaven	2.00 trips / HH
Peacehaven	1.82 trips / HH
Seaford	1.58 trips / HH
Barcombe & Hamsey	2.24 trips / HH
Newick	2.25 trips / HH
Chailey & Wivelsfield	2.43 trips / HH
Plumpton etc	2.33 trips / HH
Weighted average (urban)	1.91 trips / HH
Weighted average (rural)	2.34 trips / HH

Excluding Seaford, there are clearly two groups of results, each with little variation about their respective weighted average, but with significant differences between those weighted averages. The groups broadly represent larger urban and more rural areas. The weighted average for urban areas excludes Seaford which, if included, would increase the gap between urban and rural. Seaford shows a lower ratio of employed persons than other urban areas, more related to the current socio-economic characteristics of the town than is likely to be the case for new development. The assessment has therefore used either the urban or rural weighted average (as appropriate for any particular development) including use of the urban average in the assessment of new development in Seaford.

- **STEP 2**
Determine annual average (5-day) person total trips per household using the TRICS database.

TRICS gives estimates of person and vehicle trip rates (trips / housing unit). Person total trip rates can differ between urban and rural areas, as can the proportion of those trips by private vehicles. For mixed private / non-private residential development in larger urban areas TRICS gives a person trip rate of 7.344 trips / housing unit (generally equivalent to trips / household - HH) all modes, all purposes, over a 12 hour (0700-1900) average weekday. The equivalent average trip rate for vehicles in larger urban areas is 4.077 / HH. In rural areas the equivalent figures are 6.577 person trips / HH and 4.562 vehicle trips / HH. All TRICS data was derived using the latest version – TRICS 2012a v6.9.1. The detailed TRICS analysis is at Annex 1.

Using National Travel Survey Table NTS0503, the factor to growth 12 hour person trips (all purposes, all modes, weekdays) to 24 hour = 1.16.

Therefore annual average (5-day) person trip rate = $7.344 \times 1.16 = 8.52$ person trips / HH in larger urban areas, and $6.577 \times 1.16 = 7.62$ person trips / HH in rural areas.

- **STEP 3**
Calculate annual average (5-day) person non-commuter trips per household

Urban areas = $8.52 - 1.91 = 6.61$ trips / HH
Rural areas = $7.62 - 2.34 = 5.28$ trips / HH

- **STEP 4**
Convert commuter and non-commuter person trip rates from 5-day to 7-day (7-day = Monday to Sunday)

National Travel Survey Table NTS0504.gives ratios of annual average daily (5-day) person trip rate to annual average daily (7-day) person trip rates:

commuting = 0.80
non-commuting = 0.98

Annual average daily (7-day) person trip rates / HH are therefore:

Urban areas: commuting = $1.91 \times 0.80 = 1.53$
non-commuting = $6.61 \times 0.98 = 6.48$

Rural areas: commuting = $2.34 \times 0.80 = 1.50$
Non-commuting = $5.28 \times 0.98 = 5.17$

- **STEP 5** Convert STEP 4 figures to include only external 'strategic' trips.

Census JTW data, which would apply to commuter trips, shows the ratios between external and internal workplaces for employed residents in each of the identified areas are:

	External	Internal
Lewes	46%	54%
Ringmer	68%	32%
Newhaven	52%	48%
Peacehaven	70%	30%
Seaford	58%	42%
Barcombe & Hamsey	70%	30%
Newick	74%	26%
Chailey & Wivelsfield	72%	28%
Plumpton etc	67%	33%

Non-commuter trips would include a greater proportion of internal trips than commuter trips (because of school journeys, more walk and local cycle trips, local shopping and social trips etc). The proportion would vary by area depending on the internal availability of appropriate school, shopping and social provision.

The National Travel Survey (Tables NTS9906/7) shows that, for the South East region (and allowing for 50% of business trips to be home-based on any given day and therefore 'proxy' commuter), commuting trips comprise 16% of all trips and 25% of all distance travelled.

The average non-commuting trips would therefore have a distance travelled of 56.4% of the average commuter trip. Using that factor, adjusting the above external : internal relationships for commuter trips associated with each area, gives resultant ratios between external and internal non-commuter trips of:

	External	Internal
Lewes	26%	74%
Ringmer	38%	62%
Newhaven	29%	71%
Peacehaven	39%	61%
Seaford	33%	67%
Barcombe & Hamsey	39%	61%
Newick	42%	58%
Chailey & Wivelsfield	41%	59%
Plumpton etc	38%	62%

Annual average 7-day external, 'strategic' person trip rates are therefore:

	Commuting	Non-Commuting	TOTAL
Lewes	0.70	1.68	2.38
Ringmer	1.04	2.46	3.50
Newhaven	0.80	1.88	2.68
Peacehaven	1.07	2.53	3.60
Seaford	0.89	2.14	3.03
Barcombe & Hamsey	1.07	2.02	3.09
Newick	1.13	2.17	3.30
Chailey & Wivelsfield	1.10	2.12	3.22
Plumpton etc	1.03	1.96	2.99

- **STEP 6** Convert from person trip rates to vehicle trip rates (AADT)

Using TRICS data reported in STEP 1:

In urban areas:

TRICS person trip rate = 7.344 / HH

TRICS vehicle trip rate = 4.077 / HH

Therefore conversion from persons to vehicles = x 0.55

In rural areas:

TRICS person trip rate = 6.577/ HH

TRICS vehicle trip rate = 4.562 / HH

Therefore conversion from persons to vehicles = x 0.69

Therefore 'strategic' annual average daily vehicle (AADT) trip rates for use in this assessment are:

Lewes	$2.38 \times 0.55 = 1.31$ vehicle trips / HH
Ringmer	$3.50 \times 0.55 = 1.93$ vehicle trips / HH
Newhaven	$2.68 \times 0.55 = 1.47$ vehicle trips / HH
Peacehaven	$3.60 \times 0.55 = 1.98$ vehicle trips / HH
Seaford	$3.03 \times 0.55 = 1.67$ vehicle trips / HH
Barcombe & Hamsey	$3.09 \times 0.69 = 2.13$ vehicle trips / HH
Newick	$3.30 \times 0.69 = 2.28$ vehicle trips / HH
Chailey & Wivelsfield	$3.22 \times 0.69 = 2.22$ vehicle trips / HH
Plumpton etc	$2.99 \times 0.69 = 2.06$ vehicle trips / HH

- **STEP 7** Calculate the total number of new 'strategic' vehicle trips (AADT) that would arise from the identified housing commitments and new development.

	Housing Units	trip rate	Vehicles (AADT)
Lewes	994	1.31	1302
Ringmer	254	1.93	490
Newhaven	1862	1.47	2737

Peacehaven	1152	1.98	1693
Seaford	564	1.67	942
Barcombe & Hamsey	77	2.13	164
Newick	144	2.28	328
Chailey & Wivelsfield	498	2.22	1106
Plumpton etc + Ditchling etc	89	2.06	183
TOTAL			8945

- **STEP 8** Assign strategic vehicle trips to the highway network

At the generally coarse District / County level of the known Census distribution of commuter trips, it is reasonable to assume that the distribution of workplaces is a good proxy for the distribution of shopping and social attractors, which comprise the bulk of external non-commuter trips. The same distribution is therefore assumed for both commuter and non-commuter trips.

Route choices are determined by use of Google Maps time and distance module, with the new 'strategic' trips manually assigned to the relevant highway network. Routeing assumptions are shown in Appendix 3.

Assessment conclusions

The report has assessed development coming forward at the maximum levels considered in the Submission Draft Core Strategy. As a result of developing at this level, increases in traffic would therefore arise on the affected roads around the the Ashdown Forest Special Protection Area (SPA) / Special Area Of Conservation (SAC); the A22, A26, A275, and B2026.

Based on the assumptions above, increases in traffic on the affected roads within the Ashdown Forest SPA/SAC are forecast to be:

SOURCE	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
	TOTAL	A22	A26	A275	B2026
Lewes town	68	16	46	16	7
Ringmer	32	15	14	0	3
Newhaven	80	26	47	19	7
Seaford	39	13	22	9	4
Peacehaven	28	10	17	9	1
Barcombe + Hamsey	9	4	5	4	0
Chailey + Wivelsfield	39	20	19	20	0
Newick	28	11	17	11	0
Plumpton etc + Ditchling	7	4	3	4	0
TOTAL	330	119	190	92	22

On none of the identified 'Affected Roads' would forecast increases in traffic flow as a result of the development proposals within the Submission Draft Core Strategy exceed the threshold of 1000 AADT set out in DMRB.

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT**BARCOMBE AND HAMSEY**

77 HH @ 2.13 'STRATEGIC' VEHICLE TRIPS / HH AADT = 164

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	15	<i>A275/A27 east of Lewes</i>	4	100	N					
hastings	0	<i>A275/A27 east of Lewes</i>	0	100	N					
lewes	293	<i>NE of District (Ringmer) - A275/A26/Ham Lane</i>	69	5	N					
		<i>NE of District (Ringmer) - A275/A26 / B2192</i>		5	N					
		<i>S of District (Peacehaven / Newhaven / Seaford) - A275/A27 / A26</i>		30	N					
		<i>NW of District (Ditchling / Chailey) - local roads</i>		10	N					
		<i>Lewes town - A275</i>		50	N					
rother	6	<i>Bexhill / Battle (part) - A275/A27 east of Lewes</i>	1	50	N					
		<i>Ticehurst / Wadhurst / Battle (part) - A275/A26 / B2192 etc</i>		50	N					
wealden	64	<i>NW of District (Forest Row / Hartfield) - A275/A22</i>	15	10	Y	2	2			2
		<i>NE of District (Uckfield) - A272/A26</i>		15	N					
		<i>NE of District (Crowborough) - A272/A26</i>		15	Y	2		2		
		<i>Centre of District (Heathfield / Hailsham) - A275/A26 / B2192</i>		30	N					
		<i>S of District (Polegate) - A275/A27 east of Lewes</i>		30	N					
brighton and hove	107	<i>A27 west of Lewes</i>	25	100	N					
sevenoaks	9	<i>A272/A26</i>	2	100	Y	2		2		
tonbridge and malling	3	<i>A272/A26</i>	1	100	Y	1		1		
tunbridge wells	0	<i>A272/A26</i>	0	100	Y	0		0		
rest of kent	0	<i>A272/A26</i>	0	50	Y	0		0		
		<i>A275/A26 / B2192</i>		50	N					
adur	9	<i>A27 west of Lewes</i>	2	100	N					
crawley	25	<i>local roads</i>	6	100	N					
horsham	3	<i>local roads</i>	1	100	N					
mid sussex	57	<i>local roads</i>	13	100	N					
worthing	3	<i>A27 west of Lewes</i>	1	100	N					
rest of west sussex	9	<i>A27 west of Lewes</i>	2	50	N					
		<i>A272</i>		50	N					
inner/central london	46	<i>100% by public transport</i>	11	100	N					
outer london	21	<i>100% by public transport</i>	5	100	N					
surrey	12	<i>A275 / A22</i>	3	50	Y	2	2			2
		<i>50% public transport</i>		50	N					
elsewhere in UK	12	<i>100% public transport</i>	3	100	N					
outside UK	0	<i>100% public transport</i>	0	100	N					
TOTAL	694		164			9	4	5	4	0

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

NEWICK

144 HH @ 2.28 'STRATEGIC' VEHICLE TRIPS / HH AADT = 328

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	9	<i>A275/A27 east of Lewes</i>	3	100	N					
hastings	3	<i>A275/A27 east of Lewes</i>	1	100	N					
lewes	173	<i>NE of District (Ringmer) - A275/A26/Ham Lane</i>	65	5	N					
		<i>NE of District (Ringmer) - A275/A26 / B2192</i>		5	N					
		<i>S of District (Peacehaven / Newhaven / Seaford) - A275/A27 / A26</i>		30	N					
		<i>NW of District (Ditchling / Chailey) - local roads</i>		10	N					
		<i>Lewes town - A275</i>		50	N					
rother	3	<i>Bexhill / Battle (part) - A275/A27 east of Lewes</i>	1	50	N					
		<i>Ticehurst / Wadhurst / Battle (part) - A275/A26 / B2192 etc</i>		50	N					
wealden	143	<i>NW of District (Forest Row / Hartfield) - A275/A22</i>	54	10	Y	5	5		5	
		<i>NE of District (Uckfield) - A272/A26</i>		15	N					
		<i>NE of District (Crowborough) - A272/A26</i>		15	Y	8		8		
		<i>Centre of District (Heathfield / Hailsham) - A275/A26 / B2192</i>		30	N					
		<i>S of District (Polegate) - A275/A27 east of Lewes</i>		30	N					
brighton and hove	54	<i>A27 west of Lewes</i>	21	100	N					
sevenoaks	3	<i>A272/A26</i>	1	100	Y	1		1		
tonbridge and malling	12	<i>A272/A26</i>	5	100	Y	5		5		
tunbridge wells	6	<i>A272/A26</i>	2	100	Y	2		2		
rest of kent	3	<i>A272/A26</i>	1	50	Y	1		1		
		<i>A275/A26 / B2192</i>		50	N					
adur	8	<i>A27 west of Lewes</i>	3	100	N					
crawley	66	<i>local roads</i>	25	100	N					
horsham	15	<i>local roads</i>	6	100	N					
mid sussex	192	<i>local roads</i>	72	100	N					
worthing	0	<i>A27 west of Lewes</i>	0	100	N					
rest of west sussex	9	<i>A27 west of Lewes</i>	3	50	N					
		<i>A272</i>		50	N					
inner/central london	92	<i>100% by public transport</i>	35	100	N					
outer london	34	<i>100% by public transport</i>	13	100	N					
surrey	30	<i>A275 / A22</i>	11	50	Y	6	6		6	
		<i>50% public transport</i>		50	N					
elsewhere in UK	12	<i>100% public transport</i>	5	100	N					
outside UK	3	<i>100% public transport</i>	1	100	N					
TOTAL	870		328			28	11	17	11	0

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

CHAILEY AND WIVELSFIELD

498 HH @ 2.22 'STRATEGIC' VEHICLE TRIPS / HH AADT = 1106

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	15	<i>A275/A27 east of Lewes</i>	10	100	N					
hastings	6	<i>A275/A27 east of Lewes</i>	4	100	N					
lewes	282	<i>NE of District (Ringmer) - A275/A26/Ham Lane</i>	181	5	N					
		<i>NE of District (Ringmer) - A275/A26 / B2192</i>		5	N					
		<i>S of District (Peacehaven / Newhaven / Seaford) - A275/A27 / A26</i>		30	N					
		<i>NW of District (Ditchling / Chailey) - local roads</i>		10	N					
		<i>Lewes town - A275</i>		50	N					
rother	6	<i>Bexhill / Battle (part) - A275/A27 east of Lewes</i>	4	50	N					
		<i>Ticehurst / Wadhurst / Battle (part) - A275/A26 / B2192 etc</i>		50	N					
wealden	114	<i>NW of District (Forest Row / Hartfield) - A275/A22</i>	73	10	Y	7	7		7	
		<i>NE of District (Uckfield) - A272/A26</i>		15	N					
		<i>NE of District (Crowborough) - A272/A26</i>		15	Y	11		11		
		<i>Centre of District (Heathfield / Hailsham) - A275/A26 / B2192</i>		30	N					
		<i>S of District (Polegate) - A275/A27 east of Lewes</i>		30	N					
brighton and hove	140	<i>A27 west of Lewes</i>	90	100	N					
sevenoaks	3	<i>A272/A26</i>	2	100	Y	2		2		
tonbridge and malling	0	<i>A272/A26</i>	0	100	Y	0		0		
tunbridge wells	6	<i>A272/A26</i>	4	100	Y	4		4		
rest of kent	6	<i>A272/A26</i>	4	50	Y	2		2		
		<i>A275/A26 / B2192</i>		50	N					
adur	14	<i>A27 west of Lewes</i>	9	100	N					
crawley	155	<i>local roads</i>	100	100	N					
horsham	40	<i>local roads</i>	25	100	N					
mid sussex	596	<i>local roads</i>	383	100	N					
worthing	15	<i>A27 west of Lewes</i>	10	100	N					
rest of west sussex	6	<i>A27 west of Lewes</i>	4	50	N					
		<i>A272</i>		50	N					
inner/central london	181	<i>100% by public transport</i>	116	100	N					
outer london	62	<i>100% by public transport</i>	40	100	N					
surrey	40	<i>A275 / A22</i>	25	50	Y	13	13		13	
		<i>50% public transport</i>		50	N					
elsewhere in UK	24	<i>100% public transport</i>	15	100	N					
outside UK	11	<i>100% public transport</i>	7	100	N					
TOTAL	1722		1106			39	20	19	20	0

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

PLUMPTON etc + DITCHLING

89 HH @ 2.06 'STRATEGIC' VEHICLE TRIPS / HH AADT = 183

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	15	<i>A275/A27 east of Lewes</i>	4	100	N					
hastings	3	<i>A275/A27 east of Lewes</i>	1	100	N					
lewes	158	<i>NE of District (Ringmer) - A275/A26/Ham Lane</i>	40	5	N					
		<i>NE of District (Ringmer) - A275/A26 / B2192</i>		5	N					
		<i>S of District (Peacehaven / Newhaven / Seaford) - A275/A27 / A26</i>		30	N					
		<i>NW of District (Ditchling / Chailey) - local roads</i>		10	N					
		<i>Lewes town - A275</i>		50	N					
rother	9	<i>Bexhill / Battle (part) - A275/A27 east of Lewes</i>	2	50	N					
		<i>Ticehurst / Wadhurst / Battle (part) - A275/A26 / B2192 etc</i>		50	N					
wealden	41	<i>NW of District (Forest Row / Hartfield) - A275/A22</i>	10	10	Y	1	1			1
		<i>NE of District (Uckfield) - A272/A26</i>		15	N					
		<i>NE of District (Crowborough) - A272/A26</i>		15	Y	2			2	
		<i>Centre of District (Heathfield / Hailsham) - A275/A26 / B2192</i>		30	N					
		<i>S of District (Polegate) - A275/A27 east of Lewes</i>		30	N					
brighton and hove	79	<i>A27 west of Lewes</i>	20	100	N					
sevenoaks	0	<i>A272/A26</i>	0	100	Y	0		0		
tonbridge and malling	0	<i>A272/A26</i>	0	100	Y	0		0		
tunbridge wells	3	<i>A272/A26</i>	1	100	Y	1		1		
rest of kent	0	<i>A272/A26</i>	0	50	Y	0		0		
		<i>A275/A26 / B2192</i>		50	N					
adur	3	<i>A27 west of Lewes</i>	1	100	N					
crawley	56	<i>local roads</i>	14	100	N					
horsham	9	<i>local roads</i>	2	100	N					
mid sussex	214	<i>local roads</i>	53	100	N					
worthing	4	<i>A27 west of Lewes</i>	1	100	N					
rest of west sussex	6	<i>A27 west of Lewes</i>	2	50	N					
		<i>A272</i>		50	N					
inner/central london	90	<i>100% by public transport</i>	22	100	N					
outer london	12	<i>100% by public transport</i>	3	100	N					
surrey	21	<i>A275 / A22</i>	5	50	Y	3	3			3
		<i>50% public transport</i>		50	N					
elsewhere in UK	9	<i>100% public transport</i>	2	100	N					
outside UK	0	<i>100% public transport</i>	0	100	N					
TOTAL	732		183			7	4	3	4	0

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

LEWES TOWN

994 HH @ 1.31 'STRATEGIC' VEHICLE TRIPS / HH AADT = 1302

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	111	<i>A27 east of Lewes</i>	41	100	N					
hastings	33	<i>A27 east of Lewes</i>	12	75	N					
		<i>A26 / B2192 / A22 / A271 etc</i>		25	N					
lewes	655	<i>NE of District (Ringmer) - A26/Ham Lane</i>	243	5	N					
		<i>NE of District (Ringmer) - A26 / B2192</i>		25	N					
		<i>S of District (Peacehaven / Newhaven / Seaford) - A27 / A26</i>		60	N					
		<i>NW of District (Ditchling / Chailey) - A275</i>		10	N					
rother	30	<i>Bexhill / Battle (part) - A27 east of Lewes</i>	11	50	N					
		<i>Ticehurst / Wadhurst / Battle (part) - A26 / B2192 etc</i>		50	N					
wealden	352	<i>NW of District (Forest Row area) - A275/A22</i>	130	5	Y	7	7		7	
		<i>NW of District (Hartfield area) - A26/A22/B2026</i>		5	Y	7				7
		<i>NE of District (Uckfield) - A26</i>		15	N					
		<i>NE of District (Crowborough) - A26</i>		15	Y	20		20		
		<i>Centre of District (Heathfield / Hailsham) - A26 / B2192</i>		30	N					
		<i>S of District (Polegate) - A27 east of Lewes</i>		30	N					
brighton and hove	1118	<i>A27 west of Lewes</i>	414	100	N					
sevenoaks	6	A26	2	100	Y	2		2		
tonbridge and malling	9	A26	3	100	Y	3		3		
tunbridge wells	46	A26	17	100	Y	17		17		
rest of kent	15	A26	6	50	Y	3		3		
		<i>A26 / B2192</i>		50	N					
adur	39	<i>A27 west of Lewes</i>	15	100	N					
crawley	138	<i>A275 towards A23 etc</i>	51	100	N					
horsham	51	<i>A275 towards A23 etc</i>	19	100	N					
mid sussex	205	<i>A275 towards A23 etc</i>	76	100	N					
worthing	66	<i>A27 west of Lewes</i>	25	100	N					
rest of west sussex	12	<i>A27 west of Lewes</i>	4	50	N					
		<i>A275/A272</i>		50	N					
inner/central london	423	<i>100% by public transport</i>	157	100	N					
outer london	83	<i>100% by public transport</i>	31	100	N					
surrey	45	<i>A275 / A22</i>	17	50	Y	9	9		9	
		<i>50% public transport</i>		50	N					
elsewhere in UK	60	<i>100% public transport</i>	22	100	N					
outside UK	17	<i>100% public transport</i>	6	100	N					
TOTAL	3514		1302			68	16	45	16	7

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

RINGMER 254 HH @ 1.93 'STRATEGIC' VEHICLE TRIPS / HH AADT = 490

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	47	<i>A27 (via Glynde) or B2124</i> <i>B2124</i>	11	50	N					
hastings	9	<i>A27 (via Glynde) or B2124</i> <i>B2124</i>	2	50	N					
lewes	991	<i>NW of District (Ditchling / Chailey) - B2192/A26/A275</i> <i>S of District (Peacehaven / Newhaven / Seaford) - B2192 / A27 / A26s</i> <i>S of District (Peacehaven / Newhaven / Seaford) - Glynde / A26s</i> <i>Lewes town - B2192 / A26</i> <i>Lewes town - Ham Lane / A26</i>	239	10	N					
rother	6	<i>B2192 east of Ringmer or via Glynde / A27</i>	1	100	N					
wealden	276	<i>NW of District (Forest Row area) - A26/A22</i> <i>NW of District (Hartfield area) - A26/A22/B2026</i> <i>NE of District (Uckfield) - A26</i> <i>NE of District (Crowborough) - A26</i> <i>Centre of District (Heathfield / Hailsham) - B2192 or B2124</i> <i>S of District (Polegate) - A27 or B2124</i>	67	5	Y	3	3			
brighton and hove	344	<i>B2192 / A26 / A27 west of Lewes</i>	83	100	N					
sevenoaks	3	<i>A26</i>	1	100	Y	1		1		
tonbridge and malling	0	<i>A26</i>	0	100	Y	0		0		
tunbridge wells	9	<i>A26</i>	2	100	Y	2		2		
rest of kent	6	<i>A26</i> <i>B2192 east of Ringmer</i>	1	50	Y	1		1		
adur	16	<i>B2192 / A26 / A27 west of Lewes</i>	4	100	N					
crawley	40	<i>B2192 / A26 / A275 towards A23</i> <i>A26 / A22</i>	10	50	N					
horsham	3	<i>B2192 / A26 / A275 towards A23</i>	1	100	N					
mid sussex	85	<i>B2192 / A26 / A275 towards A23</i>	20	100	N					
worthing	9	<i>B2192 / A26 / A27 west of Lewes</i>	2	100	N					
rest of west sussex	0	<i>B2192 / A26 / A27 west of Lewes</i> <i>B2192 / A26 / A275 towards A23</i>	0	50	N					
inner/central london	74	<i>100% by rail with 75% using Lewes station (B2192/A26)</i>	18	100	N					
outer london	38	<i>100% by rail with 75% using Lewes station (B2192/A26)</i>	9	100	N					
surrey	30	<i>A26/A22</i>	7	100	Y	7	7			
elsewhere in UK	33	<i>100% by rail with 75% using Lewes station (B2192/A26)</i>	8	100	N					
outside UK	16	<i>100% by rail with 75% using Lewes station (B2192/A26)</i>	4	100	N					
TOTAL	2035		490			32	15	14	0	3

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

NEWHAVEN

1862 HH @ 1.47 'STRATEGIC' VEHICLE TRIPS / HH AADT = 2737

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	114	<i>A27 east of Lewes</i>	116	50	N					
		<i>A259</i>		50	N					
hastings	12	<i>A26/A27 east of Lewes</i>	12	75	N					
		<i>A259</i>		25	N					
lewes	1006	<i>NW of District (Dithcling/Chailey) - A26/A27/A275</i>	1021	5	N					
		<i>S of District (Peacehaven / Seaford) - A259</i>		60	N					
		<i>Lewes town - A26/A27/A26</i>		10	N					
		<i>Ringmer via A26/A27/Glynde</i>		10	N					
		<i>Ringmer via A26/A27/A26/B2192</i>		5	N					
		<i>Ringmer via A26/A27/A26/Ham Lane</i>		5	N					
rother	27	<i>A26/A27 east of Lewes</i>	27	75	N					
		<i>A259</i>		25	N					
wealden	139	<i>NW of District (Forest Row area) - A26/A22</i>	141	5	Y	7	7			
		<i>NW of District (Hartfield area) - A26/A22/B2026</i>		5	Y	7				7
		<i>NE of District (Uckfield) - A26</i>		15	N					
		<i>NE of District (Crowborough) - A26</i>		15	Y	18		18		
		<i>Centre of District (Heathfield / Hailsham) - B2192 or B2124</i>		30	N					
		<i>S of District (Polegate) - A27 or B2124</i>		30	N					
brighton and hove	804	<i>A259</i>	816	35	N					
		<i>A26/A27</i>		35	N					
		<i>public transport</i>		30	N					
sevenoaks	0	<i>A26/A27/A26</i>	0	100	Y	0		0		
tonbridge and malling	3	<i>A26/A27/A26</i>	3	100	Y	3		3		
tunbridge wells	15	<i>A26/A27/A26</i>	15	100	Y	15		15		
rest of kent	21	<i>A26/A27/A26</i>	21	50	Y	11		11		
		<i>A26/A27west</i>		50	N					
adur	50	<i>A26/A27 west of Lewes</i>	51	100	N					
crawley	106	<i>A26/A27/A275 towards A23 etc</i>	108	100	N					
horsham	21	<i>A26/A27/A275 towards A23 etc</i>	21	100	N					
mid sussex	109	<i>A26/A27/A275 towards A23 etc</i>	111	100	N					
worthing	30	<i>A26/A27 west of Lewes</i>	30	100	N					
rest of west sussex	0	<i>A26/A27 west of Lewes</i>	0	50	N					
inner/central london	81	<i>100% by public transport</i>	82	100	N					
outer london	51	<i>100% by public transport</i>	52	100	N					
surrey	36	<i>A26/A275 / A22</i>	37	50	Y	19	19		19	
		<i>50% public transport</i>		50	N					
elsewhere in UK	63	<i>100% public transport</i>	64	100	N					
outside UK	9	<i>100% public transport</i>	9	100	N					
TOTAL	2697		2737			80	26	47	19	7

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

SEAFORD

564 HH @ 1.67 'STRATEGIC' VEHICLE TRIPS / HH AADT = 942

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTEING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	536	<i>A27 east of Lewes</i>	96	20	N					
		<i>A259</i>		80	N					
hastings	48	<i>A26/A27 east of Lewes</i>	9	20	N					
		<i>A259</i>		80	N					
lewes	1995	<i>NW of District (Dithclng/Chailey) - A26/A27/A275</i>	355	5	N					
		<i>S of District (Peacehaven / Seaford) - A259</i>		60	N					
		<i>Lewes town - A26/A27/A26</i>		10	N					
		<i>Ringmer via A26/A27/Glynde</i>		10	N					
		<i>Ringmer via A26/A27/A26/B2192</i>		5	N					
		<i>Ringmer via A26/A27/A26/Ham Lane</i>		5	N					
rother	48	<i>A26/A27 east of Lewes</i>	9	75	N					
		<i>A259</i>		25	N					
wealden	396	<i>NW of District (Forest Row area) - A26/A22</i>	70	5	Y	4	4			
		<i>NW of District (Hartfield area) - A26/A22/B2026</i>		5	Y	4				4
		<i>NE of District (Uckfield) - A26</i>		15	N					
		<i>NE of District (Crowborough) - A26</i>		15	Y	11			11	
		<i>Centre of District (Heathfield / Hailsham) - B2192 or B2124</i>		30	N					
brighton and hove	1018	<i>S of District (Polegate) - A27 or B2124</i>	181	30	N					
		<i>A259</i>		35	N					
		<i>A26/A27</i>		35	N					
		<i>public transport</i>		30	N					
sevenoaks	15	<i>A26/A27/A26</i>	3	100	Y	3		3		
tonbridge and malling	3	<i>A26/A27/A26</i>	0	100	Y	0		0		
tunbridge wells	33	<i>A26/A27/A26</i>	6	100	Y	6		6		
rest of kent	24	<i>A26/A27/A26</i>	4	50	Y	2		2		
		<i>A26/A27west</i>		50	N					
adur	91	<i>A26/A27 west of Lewes</i>	16	100	N					
crawley	167	<i>A26/A27/A275 towards A23 etc</i>	30	100	N					
horsham	57	<i>A26/A27/A275 towards A23 etc</i>	10	100	N					
mid sussex	232	<i>A26/A27/A275 towards A23 etc</i>	41	100	N					
worthing	18	<i>A26/A27 west of Lewes</i>	3	100	N					
rest of west sussex	18	<i>A26/A27 west of Lewes</i>	3	50	N					
inner/central london	237	<i>100% by public transport</i>	42	100	N					
outer london	110	<i>100% by public transport</i>	20	100	N					
surrey	99	<i>A26/A275 / A22</i>	18	50	Y	9	9		9	
		<i>50% public transport</i>		50	N					
elsewhere in UK	123	<i>100% public transport</i>	22	100	N					
outside UK	23	<i>100% public transport</i>	4	100	N					
TOTAL	5291		942			39	13	22	9	4

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

ASHDOWN FOREST SPA/SAC HABITATS REGULATIONS ASSESSMENT

PEACEHAVEN

1152 HH @ 1.47 'STRATEGIC' VEHICLE TRIPS / HH AADT = 1693

WORKPLACE (LA AREA)	OUT-COMMUTERS (2001 person trips) (all modes)	ROUTING OPTIONS	TOTAL AADT	% BY EACH ROUTE	RELEVANT Y/N	ADDITIONAL TRAFFIC (AADT) USING AFFECTED ROADS				
						TOTAL	A22	A26	A275	B2026
eastbourne	111	<i>A27 east of Lewes</i>	30	50	N					
		<i>A259</i>		50	N					
hastings	15	<i>A26/A27 east of Lewes</i>	4	75	N					
		<i>A259</i>		25	N					
lewes	1425	<i>NW of District (Ditchling/Chailey) - A26/A27/A275</i>	379	5	N					
		<i>S of District (Peacehaven / Seaford) - A259</i>		60	N					
		<i>Lewes town - A26/A27/A26</i>		10	N					
		<i>Ringmer via A26/A27/Glynde</i>		10	N					
		<i>Ringmer via A26/A27/A26/B2192</i>		5	N					
		<i>Ringmer via A26/A27/A26/Ham Lane</i>		5	N					
rother	15	<i>A26/A27 east of Lewes</i>	4	75	N					
		<i>A259</i>		25	N					
wealden	101	<i>NW of District (Forest Row area) - A26/A22</i>	27	5	Y	1	1			
		<i>NW of District (Hartfield area) - A26/A22/B2026</i>		5	Y	1				1
		<i>NE of District (Uckfield) - A26</i>		15	N					
		<i>NE of District (Crowborough) - A26</i>		15	Y	4		4		
		<i>Centre of District (Heathfield / Hailsham) - B2192 or B2124</i>		30	N					
		<i>S of District (Polegate) - A27 or B2124</i>		30	N					
brighton and hove	3496	<i>A259</i>	929	70	N					
		<i>A26/A27</i>		0	N					
		<i>public transport</i>		30	N					
sevenoaks	3	<i>A26/A27/A26</i>	1	100	Y	1		1		
tonbridge and malling	15	<i>A26/A27/A26</i>	4	100	Y	4		4		
tunbridge wells	18	<i>A26/A27/A26</i>	5	100	Y	5		5		
rest of kent	24	<i>A26/A27/A26</i>	7	50	Y	3		3		
		<i>A26/A27west</i>		50	N					
adur	123	<i>A26/A27 west of Lewes</i>	33	100	N					
crawley	224	<i>A26/A27/A275 towards A23 etc</i>	60	100	N					
horsham	58	<i>A26/A27/A275 towards A23 etc</i>	16	100	N					
mid sussex	185	<i>A26/A27/A275 towards A23 etc</i>	49	100	N					
worthing	58	<i>A26/A27 west of Lewes</i>	16	100	N					
rest of west sussex	3	<i>A26/A27 west of Lewes</i>	1	50	N					
inner/central london	146	<i>100% by public transport</i>	39	100	N					
outer london	113	<i>100% by public transport</i>	30	100	N					
surrey	85	<i>A26/A275 / A22</i>	17	50	Y	9	9		9	
		<i>50% public transport</i>		50	N					
elsewhere in UK	138	<i>100% public transport</i>	37	100	N					
outside UK	17	<i>100% public transport</i>	5	100	N					
TOTAL	6373		1693			28	10	17	9	1

Entries in italics indicate routes and traffic that doesn't use affected roads

Unless otherwise stated, traffic increases assume 100% by car (i.e. no public transport use)

**ADDITIONAL TRAFFIC (AADT)
USING AFFECTED ROADS**

SOURCE	TOTAL	A22	A26	A275	B2026
Lewes town	68	16	46	16	7
Ringmer	32	15	14	0	3
Newhaven	80	26	47	19	7
Seaford	39	13	22	9	4
Peacehaven	28	10	17	9	1
Barcombe + Hamsey	9	4	5	4	0
Chailey + Wivelsfield	39	20	19	20	0
Newick	28	11	17	11	0
Plumpton etc + Ditchling	7	4	3	4	0
TOTAL	330	119	190	92	22